

**Notice of Allowability**

Application No.

10/618,678

Applicant(s)

ALLOIN, LAURENT FRANCIS

Examiner

Khanh Tran

Art Unit

2611

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the Amendment filed on 03/26/2007.
2. ☒ The allowed claim(s) is/are 1-28.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |   |
|--|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)   | 5. <input type="checkbox"/> Notice of Informal Patent Application                     |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),<br>Paper No./Mail Date _____    | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment                   |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance  |
|  | 9. <input type="checkbox"/> Other _____   |

**DETAILED ACTION**

1. The Amendment filed on 03/26/2007 has been entered. Claims 1-28 are pending in this Office action.

**EXAMINER'S AMENDMENT**

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

Regarding claim 1, in line 1, "DSL" has been changed to -- Digital Subscriber Line (DSL) --.

Regarding claim 9, in line 2, "ISDN" has been changed to -- Integrated Services Digital Network (ISDN) --.

Regarding claim 10, in line 1, "TCM-ISDN" has been changed to -- Time Compression Multiplexed - Integrated Services Digital Network (TCM-ISDN) --.

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Regarding claim 15, in line 1, "DSL" has been changed to -- Digital Subscriber Line (DSL) --.

Regarding claim 23, in line 2, "ISDN" has been changed to -- Integrated Services Digital Network (ISDN) --.

Regarding claim 24, in lines 1-2, "TCM-ISDN" has been changed to -- Time Compression Multiplexed - Integrated Services Digital Network (TCM-ISDN) --.

### ***Response to Arguments***

3. Applicant's arguments, see Applicant's arguments, filed on 03/26/2007, with respect to claims 1-4, 6-10,13-18, 20-24 and 27-28 have been fully considered and are persuasive. The rejection of claims 1-4, 6-10,13-18, 20-24 and 27-28 has been withdrawn.

### ***Reasons for Allowance***

The following is an examiner's statement of reasons for allowance:

4. Regarding claim 1, claim is allowable over prior art of record because Applicant correctly points out in the Remarks that independent claim 1 patently defines over Amrany et al. reference because Amrany fails to disclose, teach or suggest the

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features of "frequency shifting the received signal to produce multiple versions of the received signal" in combination with "providing a combined crosstalk equalizer and frequency-shifted adaptive filters to reconstruct the DMT signal and reduce crosstalk noise"

5. Regarding claim 15, claim is allowable over prior art of record because Applicant correctly points out in the Remarks that independent claim 1 patently defines over Amrany et al. reference because Amrany fails to disclose, teach or suggest the features of "a frequency-shifter that produces multiple versions of the received signal" in combination with "a combined crosstalk equalizer and frequency-shifted adaptive filters to reconstruct the DMT signal and reduce crosstalk noise".

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### **Conclusion**

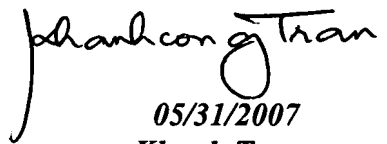
6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khanh Tran whose telephone number is 571-272-3007. The examiner can normally be reached on Monday - Friday from 08:00 AM - 05:00 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on 571-272-2988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

KCT

  
05/31/2007  
**Khanh Tran**  
**Primary Examiner, AU 2611**